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**west virginia department of environmental protection**

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

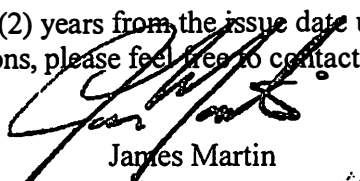
**Horizontal 6A Well**

This permit, API Well Number: 47-3305726, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 3H

Farm Name: XTO ENERGY INC.

**API Well Number: 47-3305726**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

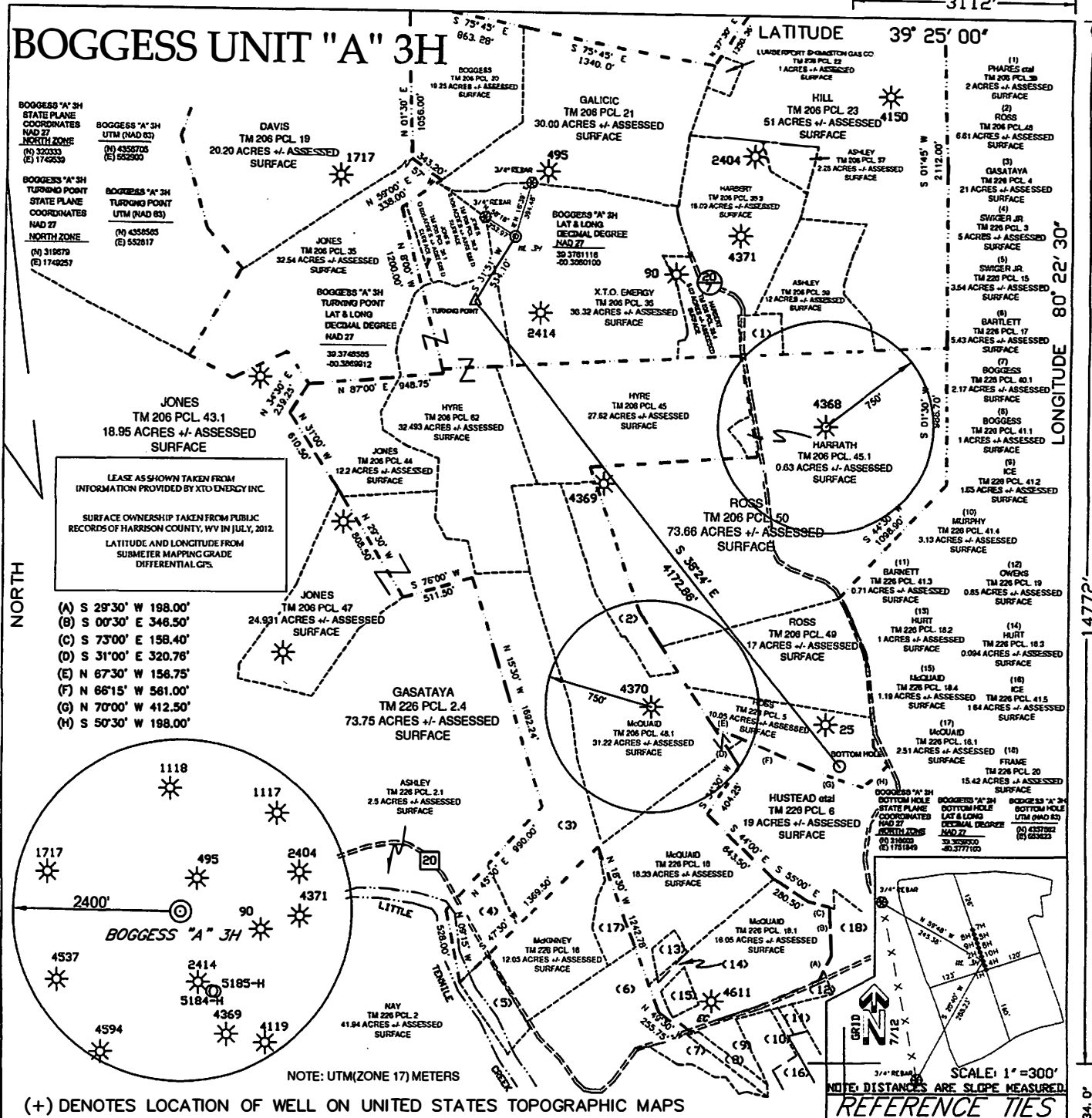
**Promoting a healthy environment.**







# BOGGESS UNIT "A" 3H



FILE NO. BOGGESS  
 DRAWING NO. 3H REV.DWG  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF  
 ACCURACY 1:200  
 PROVEN SOURCE OF  
 ELEVATION DGPS (SUBMETER GRADE)

I THE UNDERSIGNED, HEREBY CERTIFY THAT  
 THIS PLAT IS CORRECT TO THE BEST OF MY  
 KNOWLEDGE AND BELIEF AND SHOWS ALL THE  
 INFORMATION REQUIRED BY LAW AND THE REGU-  
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-  
 MENT OF ENERGY.  
 (SIGNED) Richard E. Adams  
 P.S. 986



STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OIL AND GAS DIVISION



ADAMS LAND SURVEYING, PLLC  
 P.O. BOX 584  
 TROY, WV 26443  
 (304)462-7971

DATE JANUARY 25, 20 13  
 OPERATOR'S WELL NO. 3H  
 API WELL NO. 47-033-5726 H6A  
 STATE COUNTY PERMIT

WELL TYPE: OIL X GAS X LIQUID INJECTION WASTE DISPOSAL  
 (IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW  
 LOCATION: ELEVATION 1183' WATERSHED REESES RUN A TRIBUTARY OF LITTLE TENMILE CREEK  
 DISTRICT EAGLE COUNTY HARRISON  
 QUADRANGLE WALLACE

SURFACE OWNER XTO ENERGY INC. ACREAGE 36.32 +/-  
 OIL & GAS ROYALTY OWNER BOGGESS et al LEASE ACREAGE 203.65 +/-  
 LEASE NO.                     

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR  
STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW  
FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)                     

PLUG AND ABANDON CLEAN OUT AND REPLUG  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 7250 TMD: 13,500  
 WELL OPERATOR XTO ENERGY INC. DESIGNATED AGENT GARY BEALL  
 ADDRESS 810 HOUSTON STREET ADDRESS P.O. BOX 1008 JANE LEW, WV 26385  
FORT WORTH, TEXAS 76102

Bottom Hole Coordinates: N 4357573.5, E 553621.65





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**west virginia department of environmental protection**

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601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
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Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

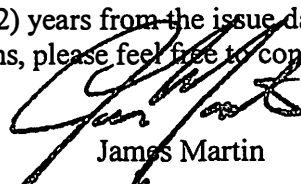
**WELL WORK PERMIT**  
**Horizontal 6A Well**

This permit, API Well Number: 47-3305727, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: BOGGESS UNIT A 4H  
Farm Name: XTO ENERGY INC.

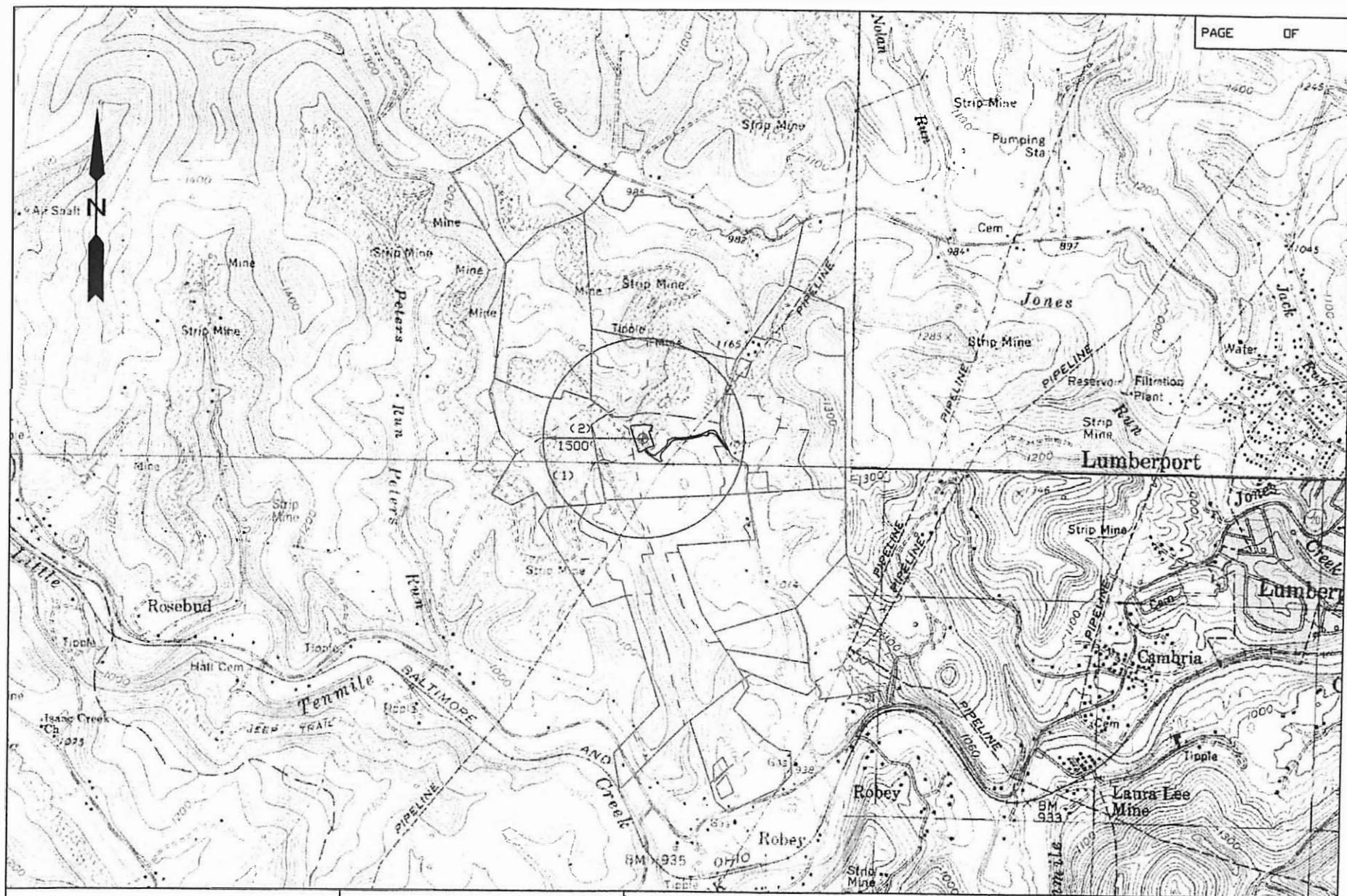
**API Well Number: 47-3305727**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**





COMPANY: WELL NO.: BOGGESS "A"	QUADRANGLE: WALLACE	COUNTY: HARRISON	DISTRICT: EAGLE
WATERSHED: REESES RUN A TRIBUTARY OF TENMILE CREEK	DATE: 9/7/12	DRAWN BY: REA	ADAMS LAND SURVEYING, PLLC P. O. BOX 584 TROY, WV 26443 304-462-7971

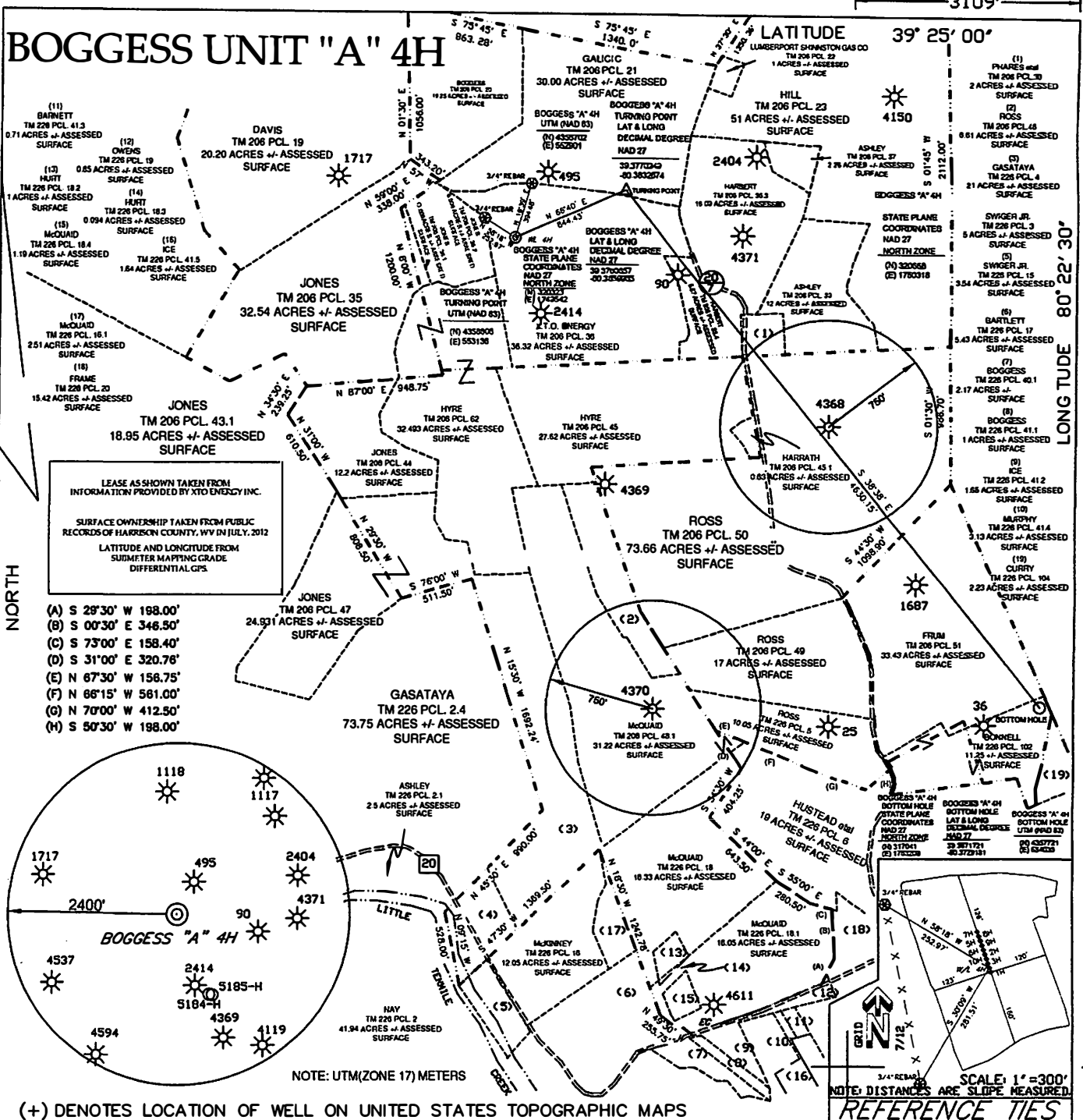
33-05727



SURVEYED LONGITUDE -80° 23' 09.5"

3109'

# BOGGESS UNIT "A" 4H



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. BOGGESS WELLS REV  
DRAWING NO. 4H REV.DWG  
SCALE 1"=1000'  
MINIMUM DEGREE OF  
ACCURACY 1:200  
PROVEN SOURCE OF  
ELEVATION DGPS (SUBMETER GRADE)

I THE UNDERSIGNED, HEREBY CERTIFY THAT  
THIS PLAT IS CORRECT TO THE BEST OF MY  
KNOWLEDGE AND BELIEF AND SHOWS ALL THE  
INFORMATION REQUIRED BY LAW AND THE REGU-  
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-  
MENT OF ENERGY.  
(SIGNED) Richard E. Adams

P.S. 986



STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OIL AND GAS DIVISION



ADAMS LAND SURVEYING, PLLC  
P.O. BOX 584  
TROY, WV 26443  
(304)462-7971

DATE JANUARY 25, 2013  
OPERATOR'S WELL NO. 4H  
API WELL NO. 47-033-5727 H6A  
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL  
(IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW  
LOCATION: ELEVATION 1183' WATERSHED REESES RUN A TRIBUTARY OF LITTLE TENMILE CREEK  
DISTRICT EAGLE COUNTY HARRISON

QUADRANGLE WALLACE  
SURFACE OWNER XTO ENERGY INC. ACREAGE 36.32 +/-  
OIL & GAS ROYALTY OWNER BOGGESS et al LEASE ACREAGE 223.06 +/-

LEASE NO.                       
PROPOSED WORK: DRILL X CONVERT                      DRILL DEEPER                      REDRILL                      FRACTURE OR  
STIMULATE X PLUG OFF OLD FORMATION                      PERFORATE NEW  
FORMATION                      OTHER PHYSICAL CHANGE IN WELL (SPECIFY)                     

PLUG AND ABANDON                      CLEAN OUT AND REPLUG                       
TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 7250, TMD: 14,500  
WELL OPERATOR XTO ENERGY INC. DESIGNATED AGENT GARY BEALL  
ADDRESS 810 HOUSTON STREET ADDRESS P.O. BOX 1008 JANE LEW. WV 26385  
FORT WORTH, TEXAS 76102

Bottom Hole Coordinates: N 4357711.9, E 554033.74





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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
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Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

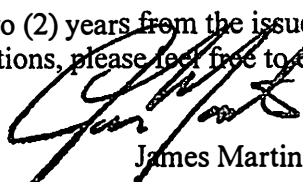
**Horizontal 6A Well**

This permit, API Well Number: 47-3305728, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: BOGGESS UNIT A 2H  
Farm Name: XTO ENERGY INC.

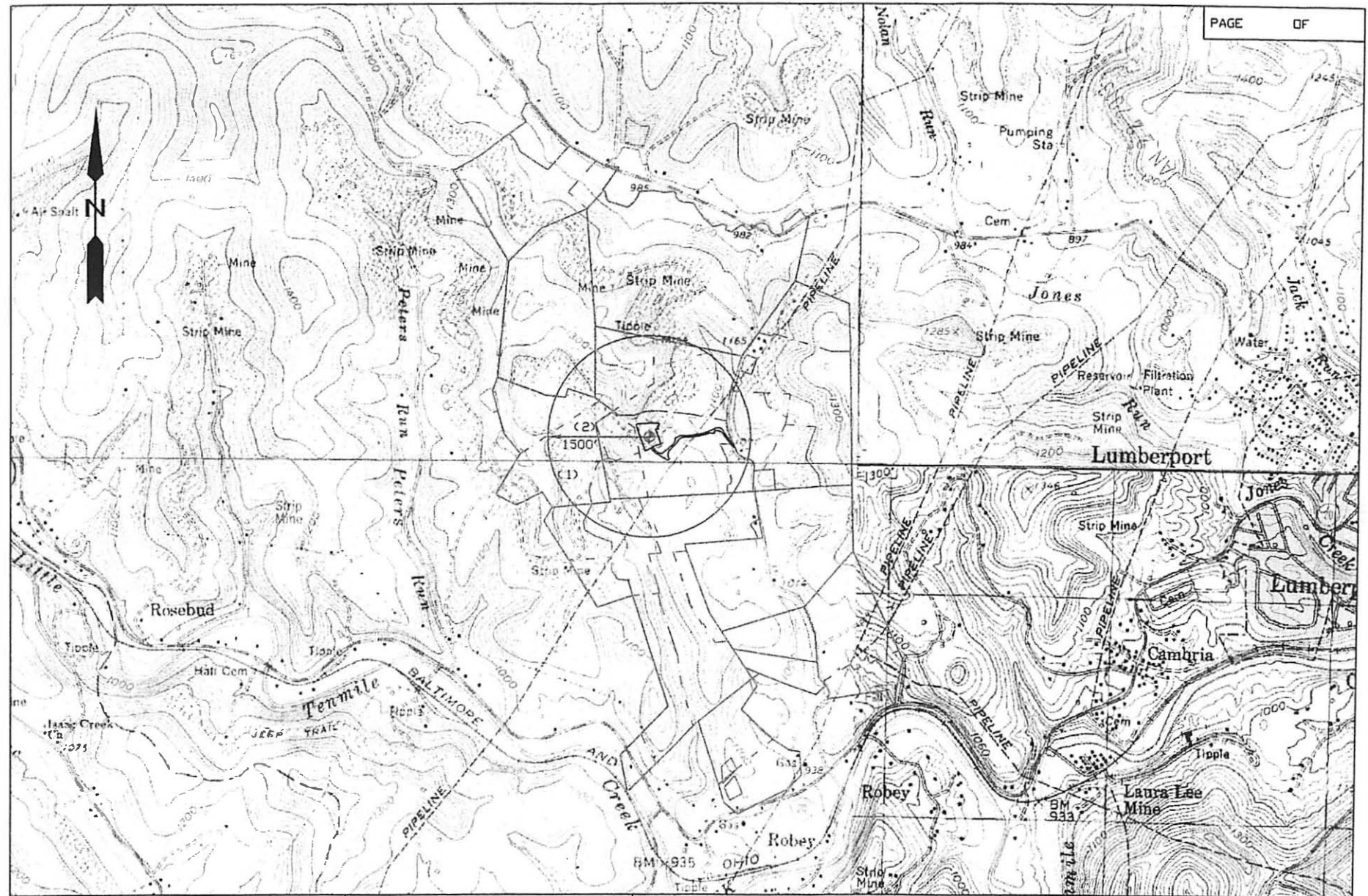
**API Well Number: 47-3305728**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**





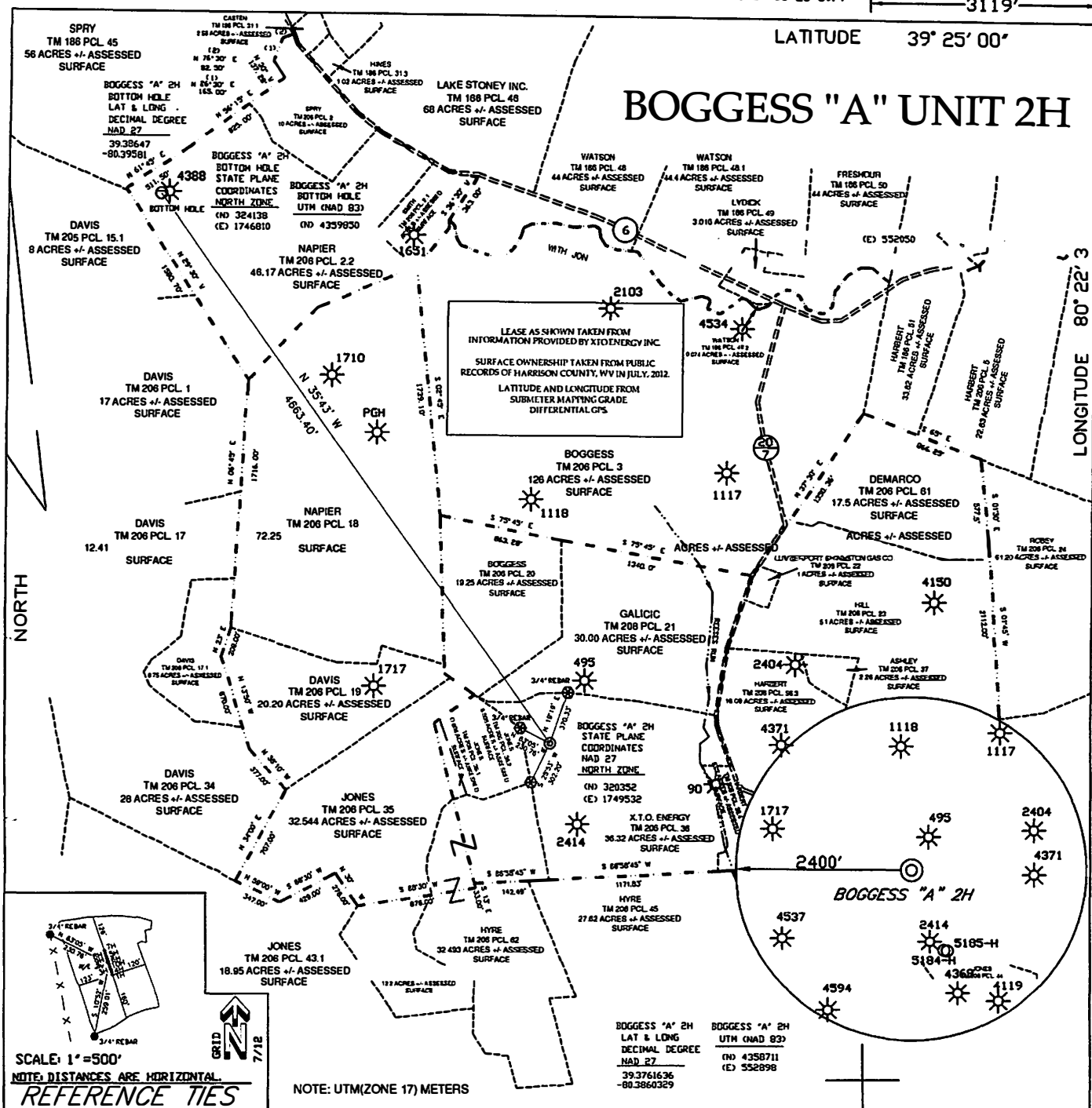
COMPANY: WELL NO.: BOGGESS "A"	QUADRANGLE: WALLACE	COUNTY: HARRISON	DISTRICT: EAGLE
WATERSHED: REESES RUN A TRIBUTARY OF TENMILE CREEK	DATE: 9/7/12	DRAWN BY: REA	ADAMS LAND SURVEYING, PLLC P.O. BOX 584 TROY, WV 26443 304-462-7971

33-05728



LATITUDE 39° 25' 00'

## BOGGESS "A" UNIT 2H



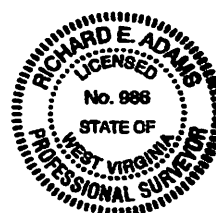
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. BOGGESS WELLS REV  
DRAWING NO. 2H REV.DWG  
SCALE 1"=1000'  
MINIMUM DEGREE OF  
ACCURACY 1:200  
PROVEN SOURCE OF  
ELEVATION DGPS (SUBMETER GRADE)

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) Richard E. Adams

P.S. 986



STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OIL AND GAS DIVISION



ADAMS LAND SURVEYING, PLLC  
P.O. BOX 584  
TROY, WV 26443  
(304) 462-7971

DATE JANUARY 25, 2013

OPERATOR'S WELL NO. 2H

API WELL NO.

47 - 033 - 5728 H6A

STATE COUNTY PERMIT

WELL TYPE: OIL\_\_\_GAS X LIQUID INJECTION\_\_\_WASTE DISPOSAL\_\_\_  
(IF "GAS,") PRODUCTION X STORAGE\_\_\_DEEP\_\_\_SHALLOW

LOCATION: (ELEVATION 1183') WATERSHED REESES RUN A TRIBUTARY OF LITTLE TENMILE CREEK  
DISTRICT EAGLE COUNTY HARRISON

QUADRANGLE WALLACE

SURFACE OWNER	<u>XTO ENERGY INC.</u>	ACREAGE	<u>36.32 +/-</u>
OIL & GAS ROYALTY OWNER	<u>BOGGES et al</u>	LEASE ACREAGE	<u>203.99 +/-</u>

LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR  
STIMULATE ☒ PLUG OFF OLD FORMATION ☐ PERFORATE NEW  
FORMATION ☐ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON\_\_\_\_CLEAN OUT AND REPLUG\_\_\_\_

TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 7250, TMD: 12,500

WELL OPERATOR XTO ENERGY DESIGNATED AGENT GARY BEALL

WELLS OF LRA, INC. DESIGNATED AGENT  
ADDRESS 810 HOUSTON STREET ADDRESS P.O. BOX 1008 JANE LEW. WV 26378  
FORT WORTH, TEXAS 76102

Bottom Hole Coordinates: N 4359841.5, E 552048.27





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**west virginia department of environmental protection**

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
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Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

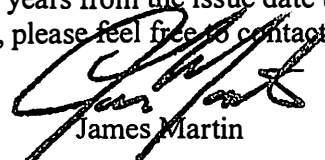
**Horizontal 6A Well**

This permit, API Well Number: 47-3305729, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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James Martin  
Chief

Operator's Well No: BOGGESS UNIT A 1H  
Farm Name: XTO ENERGY INC.

**API Well Number: 47-3305729**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**



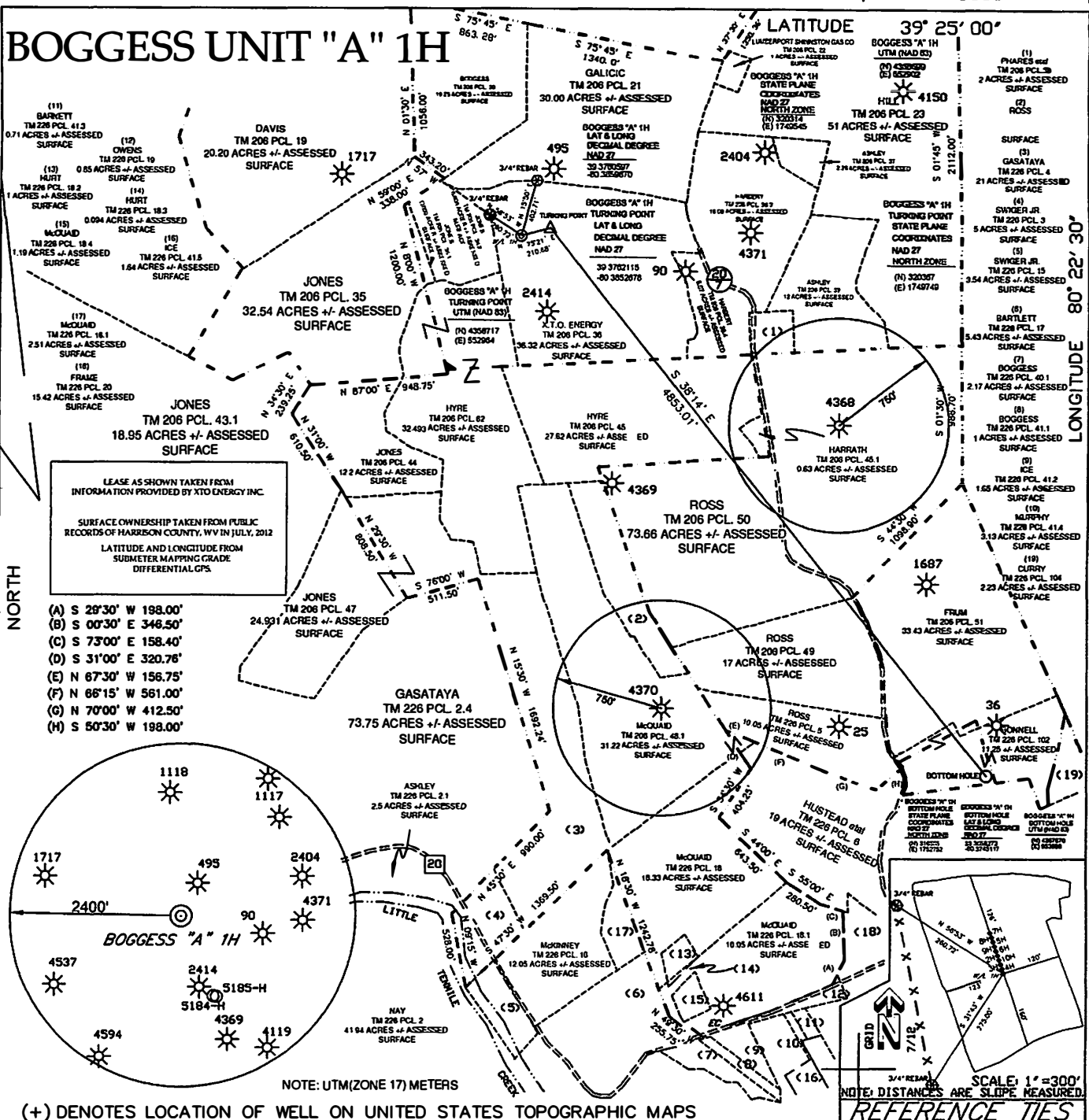




SURVEYED LONGITUDE -80 23' 09.5"

3106'

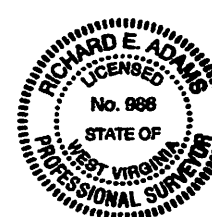
# BOGGESS UNIT "A" 1H



FILE NO. BOGGESS WELLS REV  
DRAWING NO. 1H REV.DWG  
SCALE 1"=1000'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE)

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) Richard E. Adams  
P.S. 986



STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OIL AND GAS DIVISION



ADAMS LAND SURVEYING, PLLC  
P.O. BOX 584  
TROY, WV 26443  
(304)462-7971

DATE JANUARY 25, 2013  
OPERATOR'S WELL NO. 1H  
API WELL NO. 47-033-05729 H6A  
STATE COUNTY PERMIT

WELL TYPE: OIL    GAS X LIQUID INJECTION    WASTE DISPOSAL     
(IF "GAS,") PRODUCTION    STORAGE    DEEP    SHALLOW     
LOCATION: ELEVATION 1183' WATERSHED REESES RUN A TRIBUTARY OF LITTLE TENMILE CREEK  
DISTRICT EAGLE COUNTY HARRISON  
QUADRANGLE WALLACE  
SURFACE OWNER XTO ENERGY INC. ACREAGE 36.32 +/-  
OIL & GAS ROYALTY OWNER BOGGESS et al LEASE ACREAGE 192.28 +/-  
LEASE NO.     
PROPOSED WORK: DRILL X CONVERT    DRILL DEEPER    REDRILL    FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION    PERFORATE NEW FORMATION    OTHER PHYSICAL CHANGE IN WELL (SPECIFY)     
PLUG AND ABANDON    CLEAN OUT AND REPLUG     
TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 7250, TMD: 13,500  
WELL OPERATOR XTO ENERGY INC. DESIGNATED AGENT GARY BEALL  
ADDRESS 810 HOUSTON STREET ADDRESS P.O. BOX 1008 JANE LEW. WV 26385  
FORT WORTH, TEXAS 76102

Bottom Hole Coordinates: N 435754.88, E 553897.49

FORM WW-6

COUNTY NAME PERMIT

SURVEYED LATITUDE 39° 22' 33.8"





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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

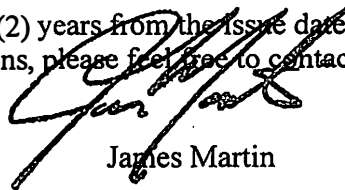
**Horizontal 6A Well**

This permit, API Well Number: 47-5101625, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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James Martin  
Chief

Operator's Well No: MNDS9AHS

Farm Name: CONSOLIDATION COAL COMPA

**API Well Number: 47-5101625**

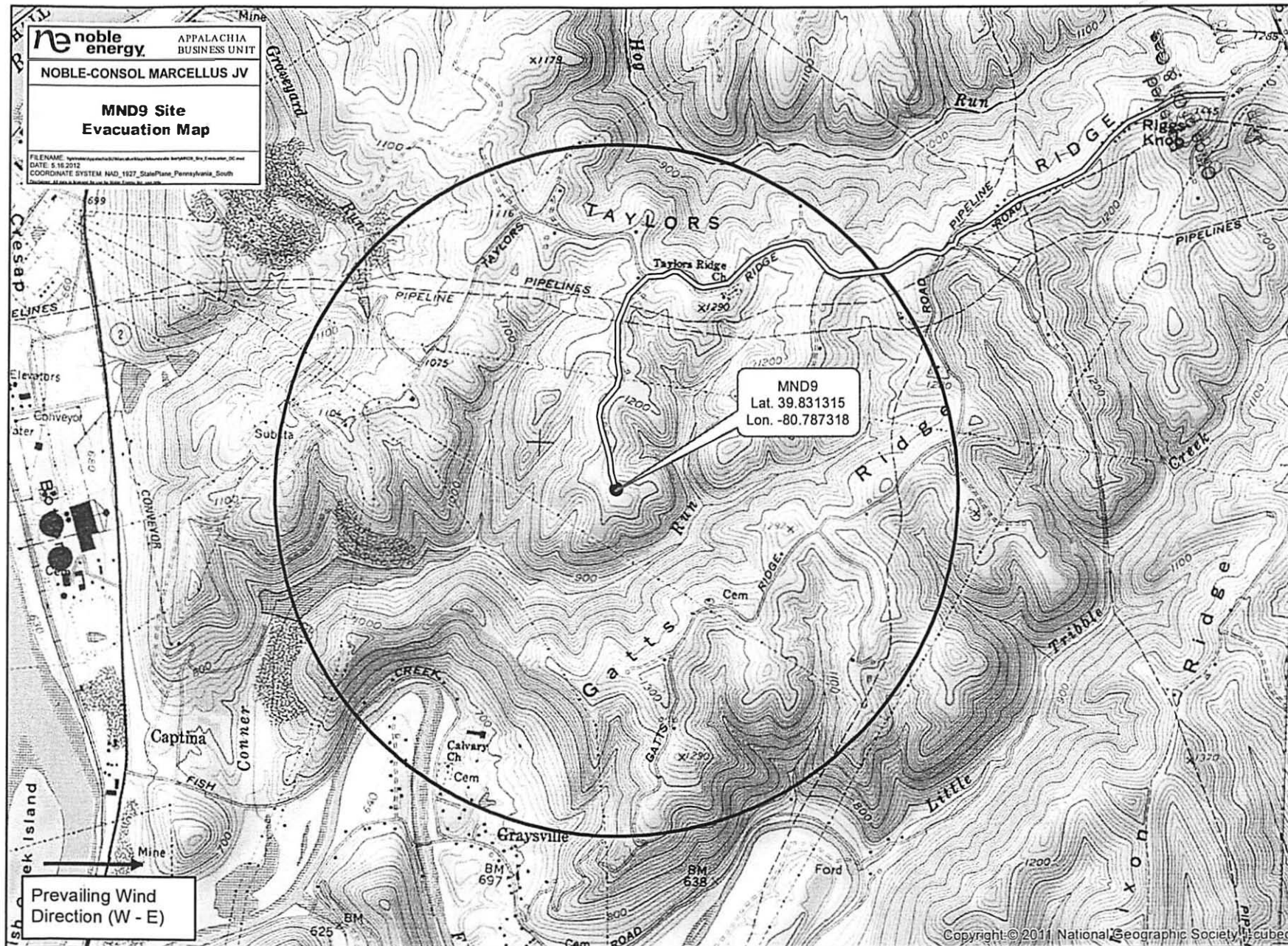
**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**



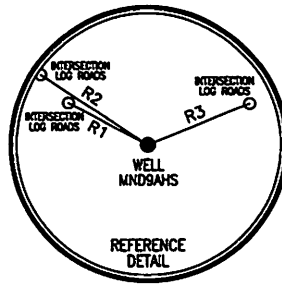
51-01625



51-01625



Well is located on topo map 737 feet south of Latitude: 39° 50' 00"



#### LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- EXISTING WELLS
- PLUGGED WELLS

**SURFACE HOLE LOCATION (SHL)**  
UTM 17-NAD83  
N:4409085.125  
E:518215.041  
NAD27, WV NORTH  
N:487488.053  
E:1638476.814

**APPROX. LANDING POINT**  
UTM 17-NAD83  
N:4408863.88  
E:517641.68  
NAD27, WV NORTH  
N:486859.149  
E:1636584.349

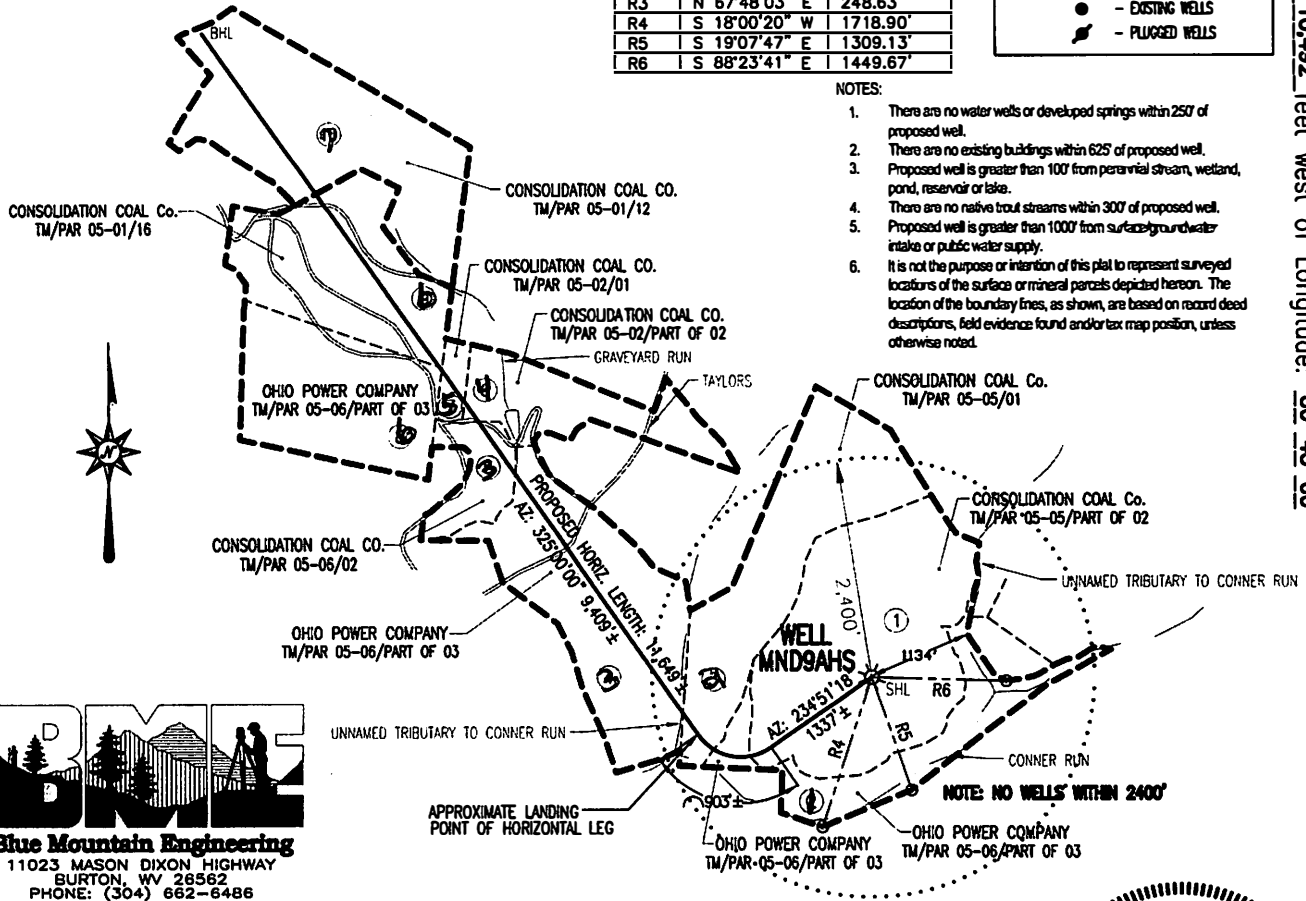
**BOTTOM HOLE LOCATION (BHL)**  
UTM 17-NAD83  
N:4411184.58  
E:515958.21  
NAD27, WV NORTH  
N:494566.945  
E:1631187.294

LINE	BEARING	DISTANCE
R1	N 61°43'25" W	204.67'
R2	N 56°24'22" W	292.26'
R3	N 67°48'03" E	248.63'
R4	S 18°00'20" W	1718.90'
R5	S 19°07'47" E	1309.13'
R6	S 88°23'41" E	1449.67'

#### NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 625' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

Well is located on topo map 10,492 feet west of Longitude: 80° 45' 00"



**Blue Mountain Engineering**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 662-6486

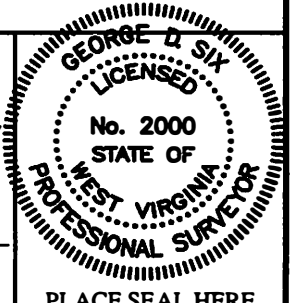
FILE #: MND9AHS  
DRAWING #: MND9AHS  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1/2500  
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed:

R.P.E.:

L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304



DATE: MARCH 6, 2013

OPERATOR'S WELL #: MND9AHS

API WELL #: 47 51 01625 H6A  
STATE COUNTY PERMIT

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep  
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: CONNER RUN ELEVATION: 1232.55'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, WV-OH 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 123.244±

OIL & GAS ROYALTY OWNER: SEE ATTACHED WW-6A1 ACREAGE: 640.066±

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐  
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐  
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,600'± TMD: 17,004'±

WELL OPERATOR NOBLE ENERGY INC. DESIGNATED AGENT STEVEN M. GREEN  
Address 333 TECHNOLOGY DRIVE Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001  
City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301





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**west virginia department of environmental protection**

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

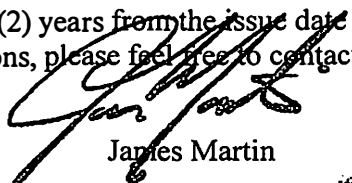
**Horizontal 6A Well**

This permit, API Well Number: 47-5101626, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

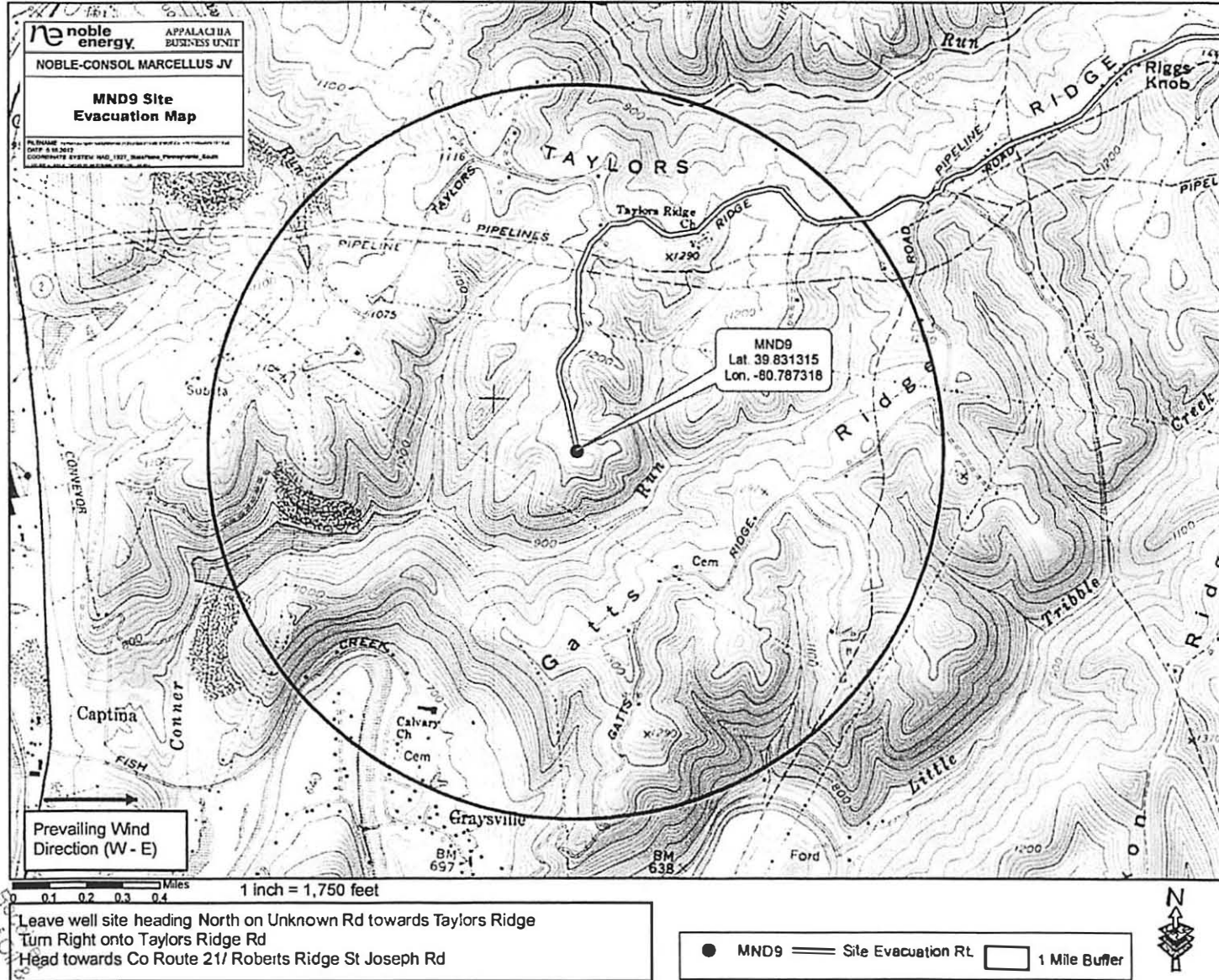


James Martin  
Chief

Operator's Well No: MNDS9BHS  
Farm Name: CONSOLIDATION COAL COMPA  
**API Well Number: 47-5101626**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 05/03/2013

**Promoting a healthy environment.**





SI-01626



LEGEND		
[Symbol]	- TOPO MAP POINT	
[Symbol]	- WELL	
[Symbol]	- ALL ARE POINTS UNLESS OTHERWISE NOTED.	
(W)	- WATER SOURCE	
[Symbol]	- MINERAL TRACT BOUNDARY	
[Symbol]	- PARCEL LINES	
[Symbol]	- WELL REFERENCE	
[Symbol]	- PROPOSED HORIZONTAL WELL	
[Symbol]	- ROAD	
[Symbol]	- STREAM CENTER LINE	

Well is located on topo map 718' feet south of Latitude: 39° 50' 00"

SURFACE HOLE LOCATION (SHL)  
UTM 17-NAD83  
N:4409071.042  
E:518216.391  
NAD27, WV NORTH  
N:487507.396  
E:1638481.567

APPROX. LANDING POINT  
UTM 17-NAD83  
N:4409000.06  
E:517826.90  
NAD27, WV NORTH  
N:487295.863  
E:1637199.579

BOTTOM HOLE LOCATION (BHL)  
UTM 17-NAD83  
N:4411345.43  
E:516125.54  
NAD27, WV NORTH  
N:495085.570  
E:1631745.167

NOTES:  
1. There are no water wells or developed springs within 250' of proposed well.  
2. There are no existing buildings within 625' of proposed well.  
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.  
4. There are no native trout streams within 300' of proposed well.  
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.  
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

WELLS WITHIN 2,400'  
- EXISTING WELLS  
- PLUGGED WELLS

CONSOLIDATION COAL Co. TM/PAR 05-01/11  
CONSOLIDATION COAL Co. TM/PAR 05-01/10  
CONSOLIDATION COAL Co. TM/PAR 05-01/16  
CONSOLIDATION COAL Co. TM/PAR 05-02/03  
CONSOLIDATION COAL Co. TM/PAR 05-02/PART OF 02 GRAVEYARD RUN  
OHIO POWER COMPANY TM/PAR 05-06/PART OF 03  
OHIO POWER COMPANY TM/PAR 05-06/PART OF 03  
UNNAMED TRIBUTARY TO CONNER RUN  
CONNER RUN  
NOTE: NO WELLS WITHIN 2400'  
OHIO POWER COMPANY TM/PAR 05-06/PART OF 03  
OHIO POWER COMPANY TM/PAR 05-06/PART OF 03  
AZ: 56°41'58" 466±

REFERENCE DETAIL  
WELL MND9BHS  
INTERSECTION LOG ROADS R1, R2, R3

LINE	BEARING	DISTANCE
R1	N 67°14'25" W	200.62'
R2	N 60°09'42" W	286.13'
R3	N 71°41'30" E	237.47'
R4	S 17°57'31" W	1738.81'
R5	S 18°39'35" E	1325.91'
R6	S 87°37'19" E	1445.55'

Blue Mountain Engineering  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 662-6486

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: \_\_\_\_\_  
R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2000

FILE #: MND9BHS  
DRAWING #: MND9BHS  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1/2500  
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

DATE: MARCH 6, 2013  
OPERATOR'S WELL #: MND9BHS  
API WELL #: 47 STATE COUNTY PERMIT 01626 HG

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep  
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: CONNER RUN ELEVATION: 1229.40'  
COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, WV-OH 7.5'  
SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 123.244±  
OIL & GAS ROYALTY OWNER: SEE ATTACHED WW-6A1 ACREAGE: 774.032±

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐  
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐  
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,327'± TMD: 16,756'±  
WELL OPERATOR NOBLE ENERGY INC. DESIGNATED AGENT STEVEN M. GREEN  
Address 333 TECHNOLOGY DRIVE Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001  
City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301





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**west virginia department of environmental protection**

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

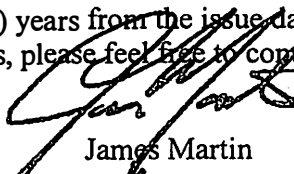
**Horizontal 6A Well**

This permit, API Well Number: 47-5101627, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

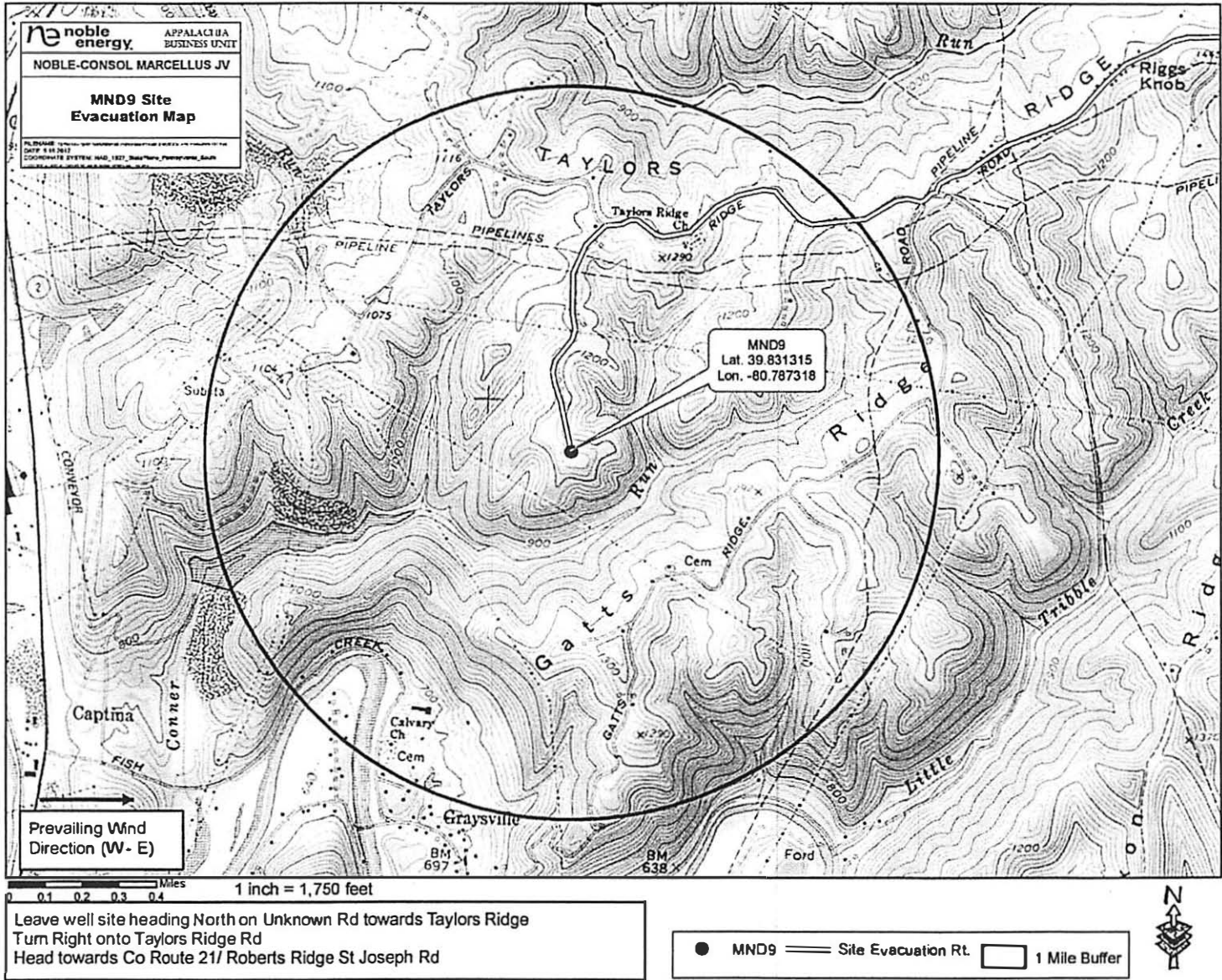


James Martin  
Chief

Operator's Well No: MNDS9CHS  
Farm Name: CONSOLIDATION COAL COMPA  
**API Well Number: 47-5101627**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 05/03/2013

**Promoting a healthy environment.**





January 2013 Version 1

11/13/2013

Received Gas  
Office of Oil & Gas

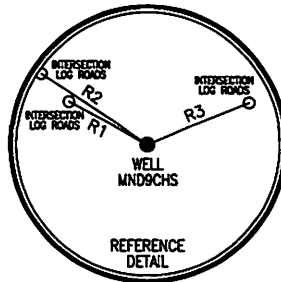


Well is located on topo map 698' feet south of Latitude: 39° 50' 00"



NOTES:

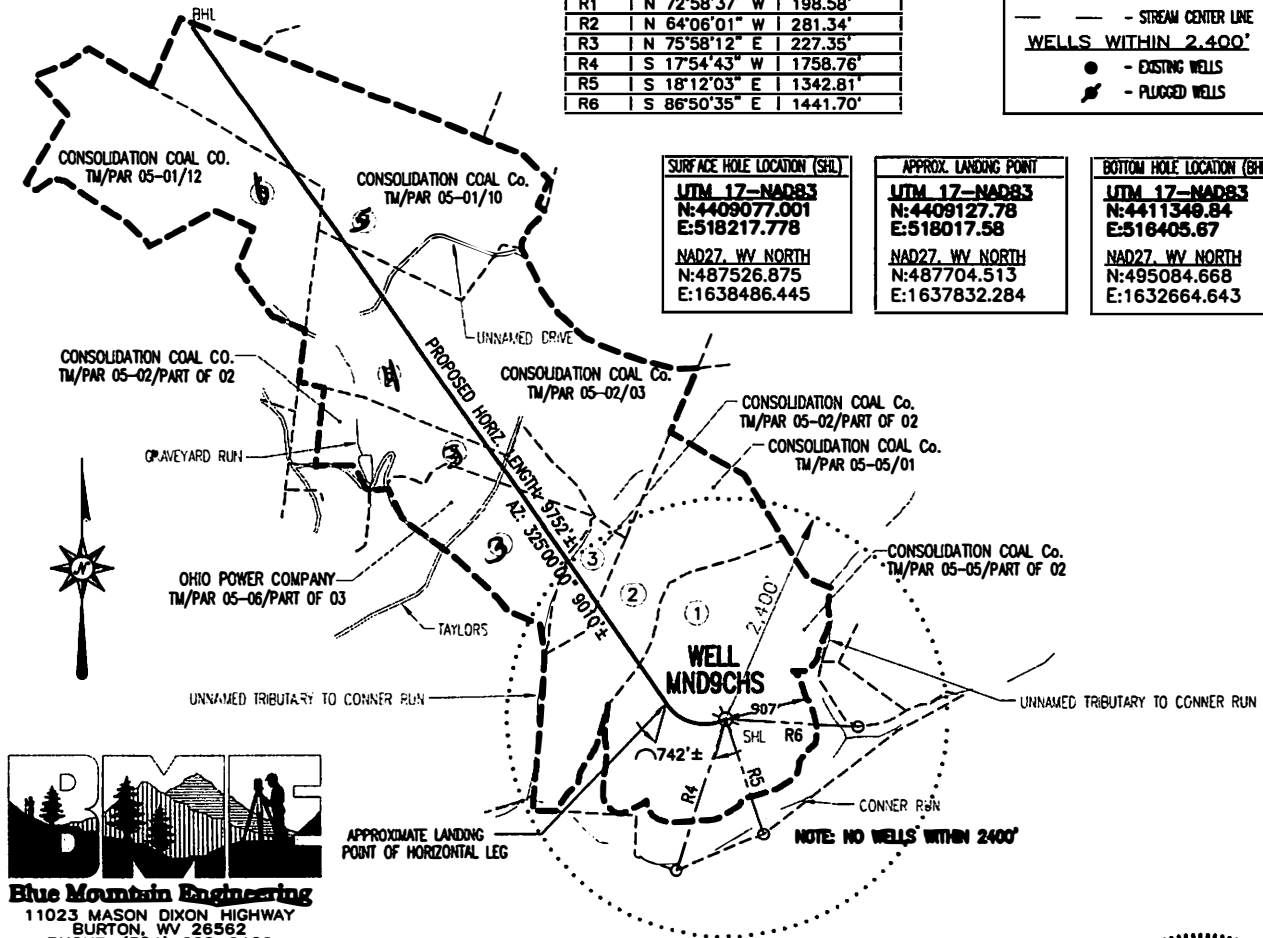
1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.



LINE	BEARING	DISTANCE
R1	N 72°58'37" W	198.58'
R2	N 64°06'01" W	281.34'
R3	N 75°58'12" E	227.35'
R4	S 17°54'43" W	1758.76'
R5	S 18°12'03" E	1342.81'
R6	S 86°50'35" E	1441.70'

LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- WELLS WITHIN 2,400'
- EXISTING WELLS
- PLUGGED WELLS



**Blue Mountain Engineering**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 25562  
PHONE: (304) 662-6486

FILE #: MND9CHS

DRAWING #: MND9CHS

SCALE: 1" = 2000'

MINIMUM DEGREE  
OF ACCURACY: 1/2500

PROVEN SOURCE  
OF ELEVATION: U.S.G.S. MONUMENT  
THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS  
PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND  
BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY  
LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY  
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed:

R.P.E.: L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON  
UNITED STATES TOPOGRAPHIC MAPS  
WVDEP

OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304



DATE: MARCH 6, 2013

OPERATOR'S WELL #: MND9CHS

API WELL #: 47 51 **01627 H6A**  
STATE COUNTY PERMIT

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep  
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: CONNER RUN ELEVATION: 1226.69'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, WV-OH 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 123.244±

OIL & GAS ROYALTY OWNER: SEE ATTACHED WW-6A1 ACREAGE: 685.95±

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐  
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐  
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: ARCELLUS ESTIMATED DEPTH: TVD: 6,600'± TMD: 16,038'±

WELL OPERATOR NOBLE ENERGY INC.

DESIGNATED AGENT STEVEN M. GREEN

Address 333 TECHNOLOGY DRIVE

Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001

City CANONSBURG State PA Zip Code 15317

City CHARLESTON State WV Zip Code 25301





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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

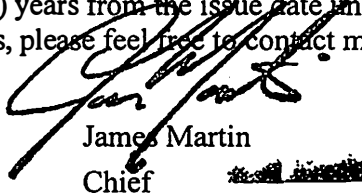
**Horizontal 6A Well**

This permit, API Well Number: 47-5101628, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: MNDS9EHS

Farm Name: CONSOLIDATION COAL COMPA

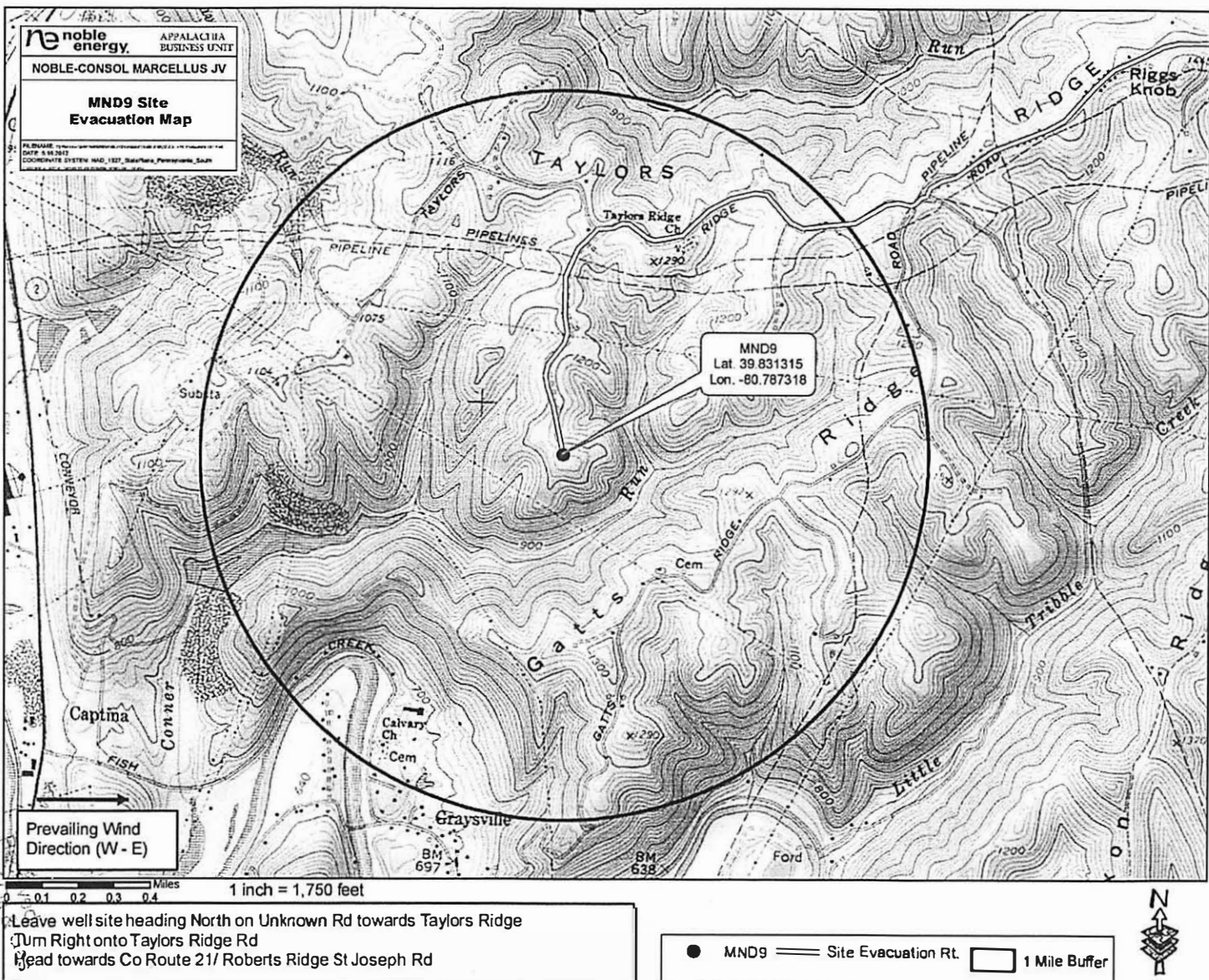
**API Well Number: 47-5101628**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**





January 2013 Version 1



Well is located on topo map 659' feet south of Latitude: 39° 50' 00"

Well is located on topo map 10474' feet west of Longitude: 80° 45' 00"

**SURFACE HOLE LOCATION (SHL)**

UTM 17-NAD83  
N:4408088.858  
E:518220.475

NAD27, WV NORTH  
N:487565.636  
E:1638495.947

**APPROX. LANDING POINT**

UTM 17-NAD83  
N:4408410.82  
E:518375.20

NAD27, WV NORTH  
N:488613.023  
E:1639021.299

**BOTTOM HOLE LOCATION (BHL)**

UTM 17-NAD83  
N:4411556.23  
E:516818.75

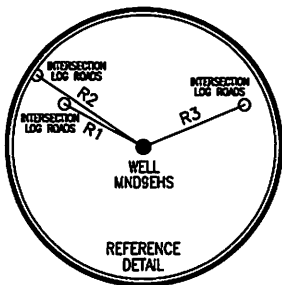
NAD27, WV NORTH  
N:495739.258  
E:1634031.462

**NOTES:**

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

**LEGEND**

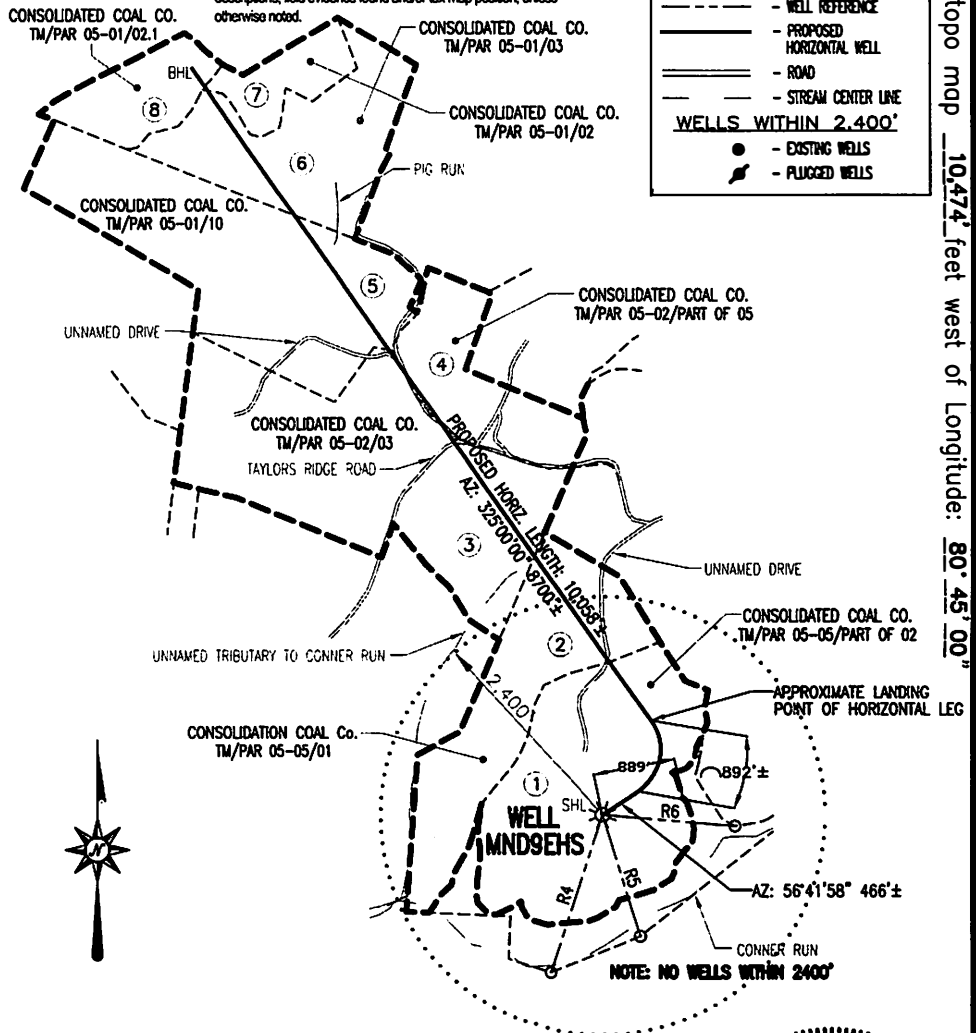
- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- WELLS WITHIN 2,400'**
- EXISTING WELLS
- PLUGGED WELLS



LINE	BEARING	DISTANCE
R1	N 84°26'59" W	200.32'
R2	N 72°14'08" W	275.73'
R3	N 85°34'08" E	211.70'
R4	S 17°49'20" W	1798.66'
R5	S 17°19'01" E	1376.87'
R6	S 85°16'24" E	1434.80'



**Blue Mountain Engineering**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 662-6486



FILE #: MND9EHS

DRAWING #: MND9EHS

SCALE: 1" = 2000'

MINIMUM DEGREE

OF ACCURACY: 1/2500

PROVEN SOURCE  
OF ELEVATION: U.S.G.S. MONUMENT  
THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS  
PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND  
BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY  
LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY  
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed:

R.P.E.:

L.L.S.: P.S. No. 2000



PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON  
UNITED STATES TOPOGRAPHIC MAPS  
WVDEP

OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304



DATE: MARCH 6, 2013

OPERATOR'S WELL #: MND9EHS

API WELL #: 47 51 01628 H6A  
STATE COUNTY PERMIT

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep  
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: CONNER RUN ELEVATION: 1218.78'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, WV-OH 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 123.244±

OIL & GAS ROYALTY OWNER: SEE ATTACHED WW-6A1 ACREAGE: 653.407±

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐  
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐  
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,600'± TMD: 15,971'±

WELL OPERATOR NOBLE ENERGY INC.

DESIGNATED AGENT STEVEN M. GREEN

Address 333 TECHNOLOGY DRIVE

Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001

City CANONSBURG State PA Zip Code 15317

City CHARLESTON State WV Zip Code 25301





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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

**WELL WORK PERMIT**

**Horizontal 6A Well**

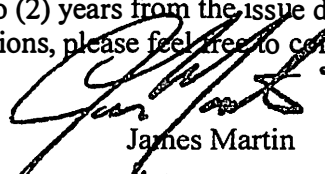
This permit, API Well Number: 47-5101629, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto.

Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: MNDS9FHS

Farm Name: CONSOLIDATION COAL COMPA

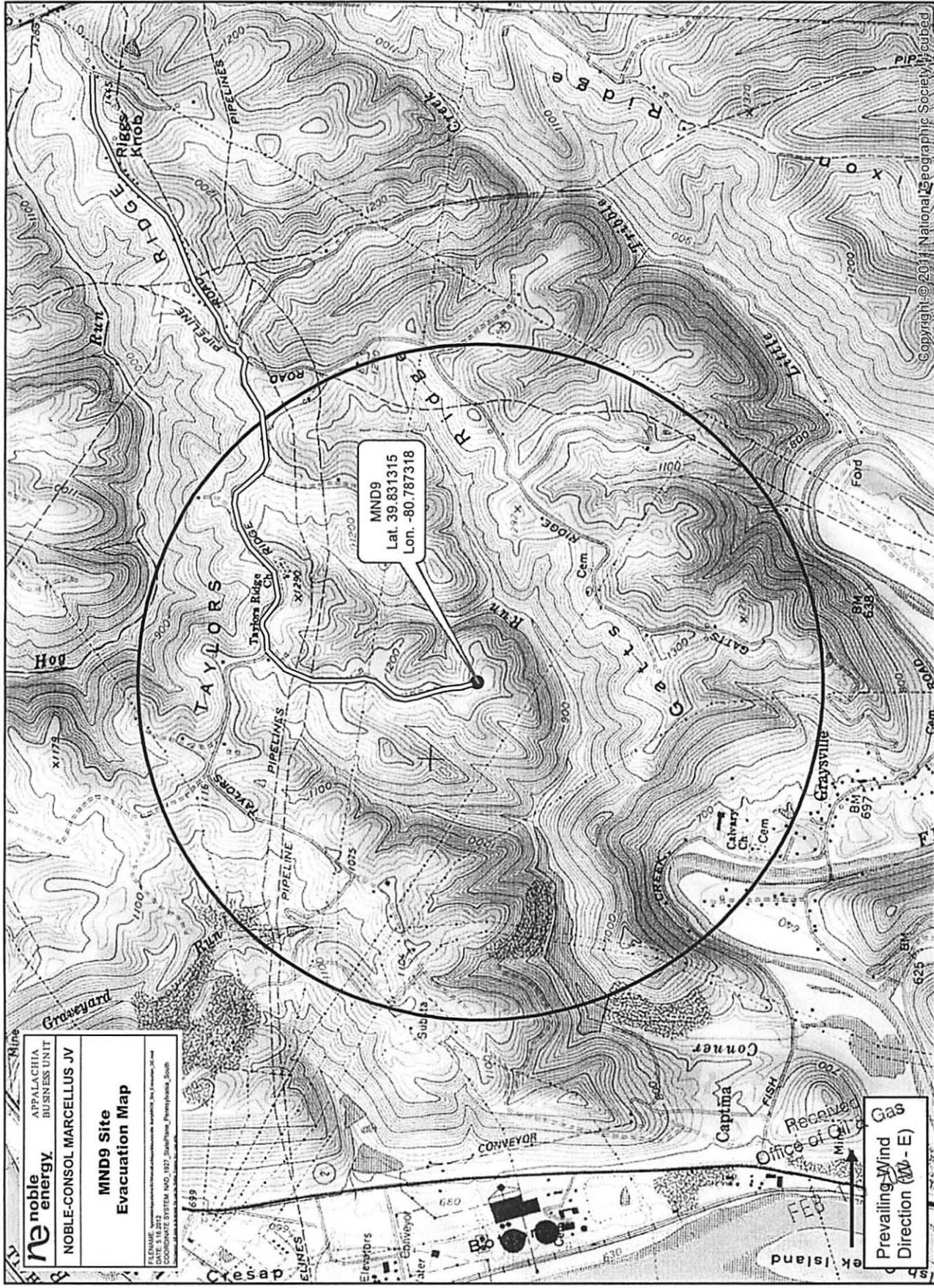
**API Well Number: 47-5101629**

**Permit Type: Horizontal 6A Well**

Date Issued: 05/03/2013

**Promoting a healthy environment.**





MND9

1 Mile Buffer

Site Evacuation Rt.

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1 inch = 2,000 feet

Leave well site heading North on Unknown Rd towards Taylors Ridge  
Turn Right onto Taylors Ridge Rd  
Head towards Co Route 21/ Roberts Ridge St Joseph Rd

Prevaling Wind  
Direction (W - E)



Well is located on topo map 640' feet south of Latitude: 39° 50' 00"

Well is located on topo map 10,470' feet west of Longitude: 80° 45' 00"

**SURFACE HOLE LOCATION (SHL)**  
**UTM 17-NAD83**  
**N:4409177.980**  
**E:518220.455**  
**NAD27, WV NORTH**  
**N:487585.123**  
**E:1638500.762**

**APPROX. LANDING POINT**  
**UTM 17-NAD83**  
**N:4409266.64**  
**E:518205.23**  
**NAD27, WV NORTH**  
**N:488117.058**  
**E:1638455.115**

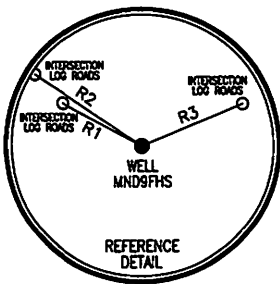
**BOTTOM HOLE LOCATION (BHL)**  
**UTM 17-NAD83**  
**N:4411448.36**  
**E:516615.33**  
**NAD27, WV NORTH**  
**N:495396.465**  
**E:1633358.024**

NOTES:

1. There are no water wells or developed springs within 200' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

LEGEND

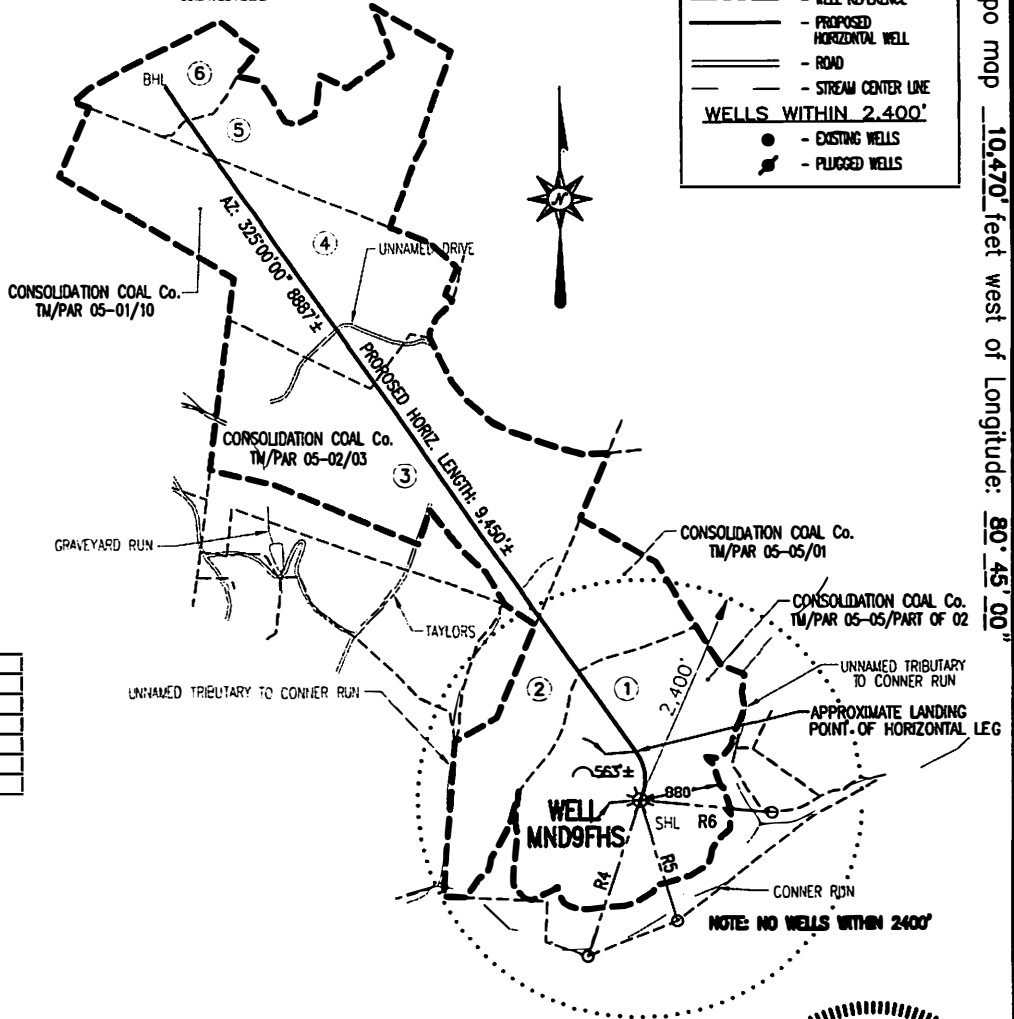
- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- WELLS WITHIN 2,400'
- EXISTING WELLS
- PLUGGED WELLS



LINE	BEARING	DISTANCE
R1	S 89°58'07" W	204.20'
R2	N 76°24'37" W	275.10'
R3	S 89°07'49" E	206.28'
R4	S 17°46'43" W	1818.61'
R5	S 16°53'29" E	1394.02'
R6	S 84°28'59" E	1431.76'



**Blue Mountain Engineering**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 25562  
PHONE: (304) 662-6486



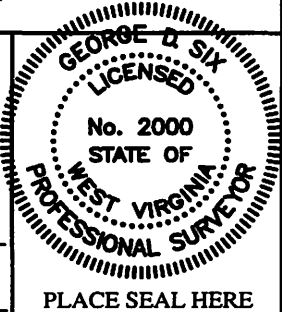
FILE #: MND9FHS  
DRAWING #: MND9FHS  
SCALE: 1" = 2000'  
MINIMUM DEGREE  
OF ACCURACY: 1/2500  
PROVEN SOURCE  
OF ELEVATION: U.S.G.S. MONUMENT  
THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS  
PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND  
BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY  
LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY  
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: [Signature]

R.P.E.: \_\_\_\_\_

L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON  
UNITED STATES TOPOGRAPHIC MAPS  
WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304



DATE: MARCH 6, 2013

OPERATOR'S WELL #: MND9FHS

API WELL #: 47 51 01629 H6A  
STATE COUNTY PERMIT

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep  
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: CONNER RUN ELEVATION: 1212.58'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWATAN POINT, WV-OH 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 123.244±

OIL & GAS ROYALTY OWNER: SEE ATTACHED WW-6A1 ACREAGE: 586.527±

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐  
PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐  
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY): \_\_\_\_\_

TARGET FORMATION: ARCELLUS ESTIMATED DEPTH: TVD: 6,600'± TMD: 15,867'±

WELL OPERATOR NOBLE ENERGY INC.

DESIGNATED AGENT STEVEN M. GREEN

Address 333 TECHNOLOGY DRIVE

Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001

City CANONSBURG State PA Zip Code 15317

City CHARLESTON State WV Zip Code 25301





west virginia department of environmental protection

Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

May 03, 2013

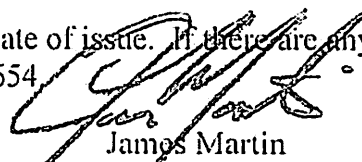
**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8703410, issued to TRIAD HUNTER, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 19

Farm Name: WV DIVISION OF NATURAL RES

API Well Number: 47-8703410

Permit Type: Plugging

Date Issued: 05/03/2013

**Promoting a healthy environment.**

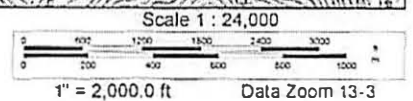
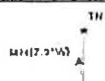




Data use subject to license.

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www.delorme.com





8703410 r

WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas  
**WELL LOCATION FORM: GPS**

API: 47-087-3410 WELL NO.: 19  
FARM NAME: Kate Nixon  
RESPONSIBLE PARTY NAME: Triad Hunter, LLC  
COUNTY: Roane DISTRICT: Geary  
QUADRANGLE: Newton  
SURFACE OWNER: WV Division of Natural Resources  
ROYALTY OWNER: Please see attached sheet  
UTM GPS NORTHING: 4268178.45  
UTM GPS EASTING: 486774.44 GPS ELEVATION: 919'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS \_\_\_\_: Post Processed Differential \_\_\_\_

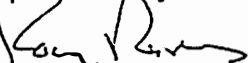
Real-Time Differential \_\_\_\_

Mapping Grade GPS X: Post Processed Differential X

Real-Time Differential \_\_\_\_

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

  
Signature

SK. VV. Affabacchio OP.  
Title

2/20/2013  
Date





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**west virginia department of environmental protection**

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

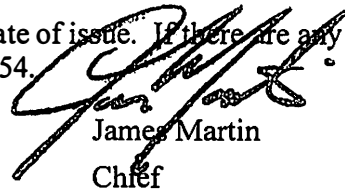
**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8703407, issued to TRIAD HUNTER, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 220  
Farm Name: TRIAD HUNTER  
**API Well Number: 47-8703407**  
**Permit Type: Plugging**  
Date Issued: 05/03/2013

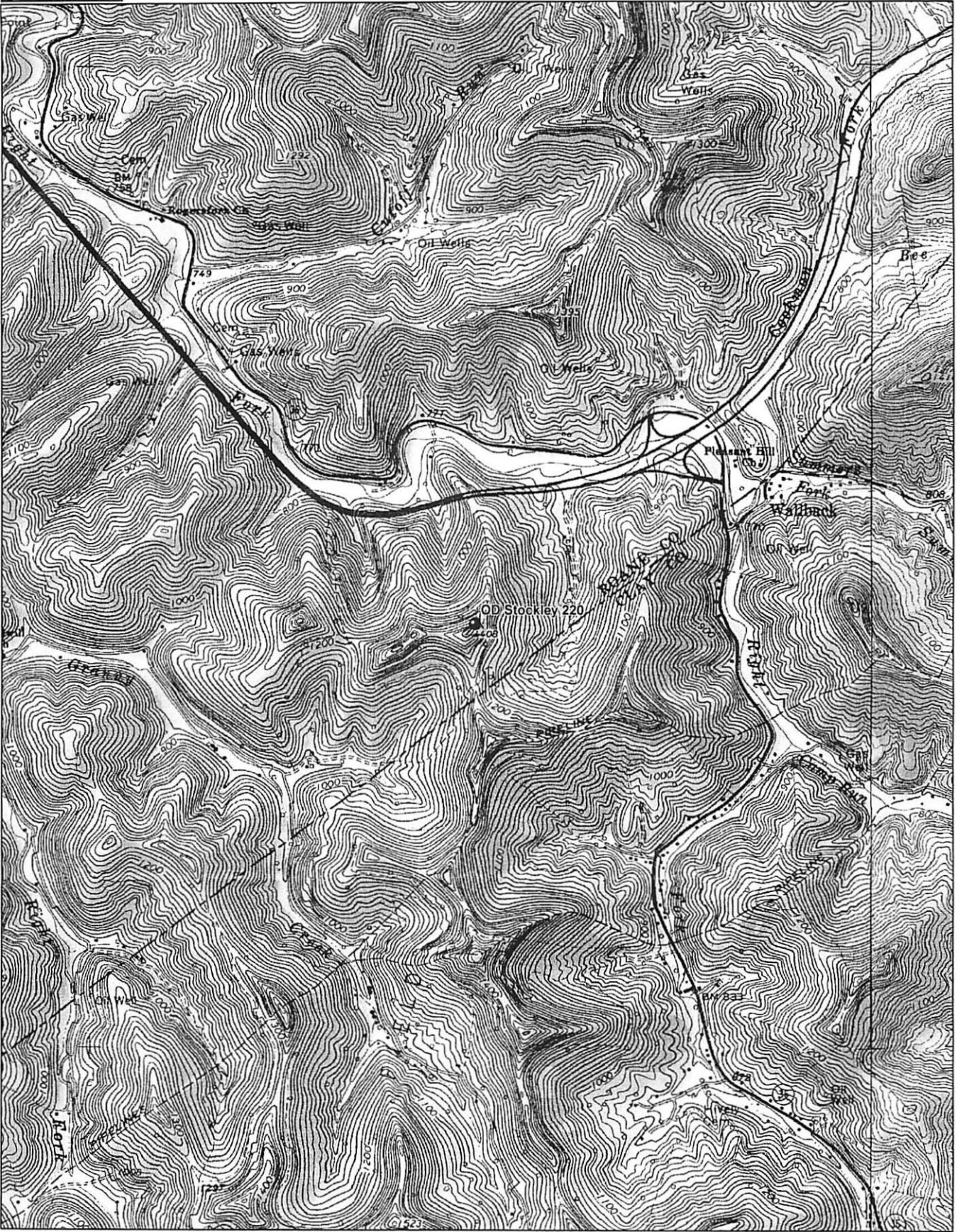
**Promoting a healthy environment.**



870 3407 P

DeLORME

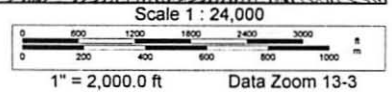
XMap® 7



Data use subject to license.

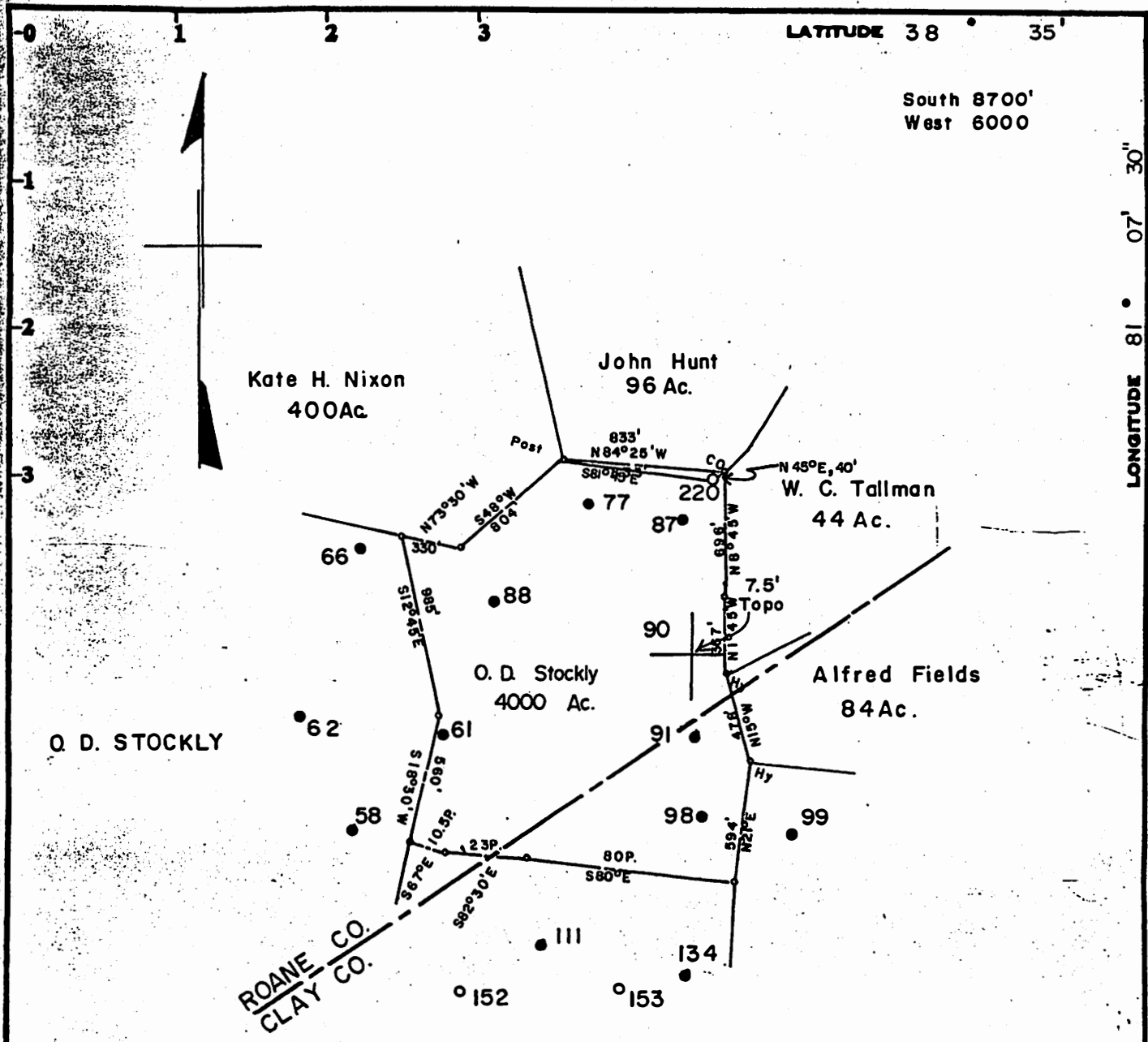
© DeLorme. XMap® 7.

www.delorme.com





8703407A



Minimum Error of Closure 1 in 200

Source of Elevation O. D. Stockly 197 Elev. 1297.41

Fracture ☐  
 New Location ☒ Injection Well  
 Drill Deeper ☐  
 Abandonment ☐

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: Curtis A. Lucas  
 Map No. 83 Squares: N 31

Company	PENNZOIL COMPANY
Address	P. O. Box 1588, Parkersburg, W. Va. 26101
Farm	O. D. STOCKLY
Tract	Acres <u>4000</u> Lease No. <u>60643-50</u>
Well (Farm) No.	<u>220</u> Serial No. <u>      </u>
Elevation (Spirit Level)	<u>1413.59'</u>
Quadrangle	<u>Newton 7.5'</u>
County	<u>Clay</u> District <u>Henry</u>
Surveyor	CURTIS A. LUCAS
Surveyor's Registration No.	<u>275</u>
File No.	<u>640</u> Drawing No. <u>      </u>
Date	<u>March 18, 1981</u> Scale <u>1" = 800'</u>

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

## WELL LOCATION MAP

FILE NO.       

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

BRUNING 44-131 27198





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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

May 03, 2013

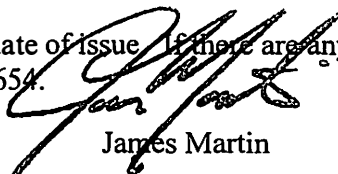
**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8703661, issued to TRIAD HUNTER, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 32  
Farm Name: TRIAD HUNTER, LLC  
**API Well Number: 47-8703661**  
**Permit Type: Plugging**  
Date Issued: 05/03/2013

**Promoting a healthy environment.**



TariffField  
SMITHFIELD district  
Roane Co., West Virginia

WELL SYMBOLS  
● Oil Well

4708703661  
D Jones/W M Looney 32

PETRA 4/5/2013 9:33:04 AM

Received  
Office of Oil & Gas  
APR - 8 2013



WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-087-3661 WELL NO.: 32  
FARM NAME: WM Looney  
RESPONSIBLE PARTY NAME: Triad Hunter, LLC  
COUNTY: Roane DISTRICT: Smithfield  
QUADRANGLE: Newton  
SURFACE OWNER: Triad Hunter, LLC  
ROYALTY OWNER: Please see attached sheets  
UTM GPS NORTHING: 4278089  
UTM GPS EASTING: 481633 GPS ELEVATION: 1181'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS \_\_\_\_: Post Processed Differential \_\_\_\_

Real-Time Differential \_\_\_\_

Mapping Grade GPS X: Post Processed Differential X

Real-Time Differential \_\_\_\_

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Signature

*Ben Smeltzer*

Title

*Geologist*

Date

*4/3/13*

Received  
Office of Oil & Gas

APR - 4 2013